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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/811,939

03/30/2004

Kotaro Kitajima

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09/18/2007

FITZPATRICK CELLA HARPER & SCINTO
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NEW YORK, NY 10112

EXAMINER

KASSA, YOSEF

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

09/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/811,939

Applicant(s)

KITAJIMA, KOTARO

Examiner

YOSEF KASSA

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>03/04 & 10/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 10-14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foote et al (U.S. Patent 7,015,954), and further in view of Tamaki et al (U.S. Patent 6,791,616).

With regard to claim 1, Foote discloses an input unit (please refer to Fig. 12, items 1200-1 to 1200-3) for inputting image data (refer to col. 11, lines 52-55).

Foote does not disclose expressly for an attachment unit for attaching mesh image data as a component of the input image data. However, at the same field of endeavor, Tamaki et al disclose this feature (refer to col. 12, lines 5-13). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of Tamaki pattern transforming onto distorted image system into Foote system. The suggestion/motivation for doing so would have been to provide lens distortion image correction system. Therefore, it would have been obvious to combine Tamaki with Foote to obtain the invention as specified in claim 1.

With regard to claim 2, Foote discloses further comprising a processing unit for processing the image data input by the input unit, and wherein the attachment unit attaches mesh

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image data transformed according to how the processing unit processes the image data (refer to col. 11, lines 52-67).

With regard to claim 3, Foote discloses wherein the attachment unit attaches mesh image data transformed according to attribute information of the image data input by the input unit (refer to col. 11, lines 1-12).

With regard to claim 4, Foote discloses wherein the attachment unit attaches mesh image data transformed according to information relating to an optical system that senses the image data (refer to col. 12, lines 10-16).

With regard to claim 5, Foote discloses wherein the attachment unit attaches mesh image data transformed according to information on a bulge aberration of the optical system (refer to Fig. 10, items 1000-1030).

With regard to claim 6, Foote discloses wherein the attachment unit attaches mesh image data transformed according to information on a zoom magnification of the optical system (refer to col. 6, lines 31-37).

With regard to claim 7, Foote discloses wherein the attachment unit attaches mesh image data having a large mesh size when the image data has been sensed on a telescopic side of the optical system and attaches mesh image data having a small mesh size when the image data has been sensed on a wide angle side of the optical system (refer to Fig. 8, item 10 and 11).

With regard to claim 8, Foote discloses further comprising a sensor that detects a tilt of the optical system, and wherein the attachment unit attaches mesh image data according to a tilt of the optical system (refer to col. 6, lines 37-43).

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With regard to claim 10, Foote discloses further comprising a display unit for selectively displaying either the mesh image data alone or both the input image data and the mesh image data in combination (refer to Fig. 8, 10 and 11).

Claims 11 and 18 are similarly analyzed and rejected the same as claim 1. Except, the additional limitation "a recording unit for recording the input image data and the mesh image data onto a storage medium" (refer to col. 11, lines 62-67).

Claims 12-14 are similarly analyzed and rejected the same as claims 2-4.

With regard to claim 16, Foote discloses further comprising a reproduction unit for reproducing the input image data and the mesh image data recorded on the storage medium (refer to col. 11, lines 62-67).

Claims 17, 19 and 20 are similarly analyzed and rejected the same as claim 1.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foote et al (U.S. Patent 7,015,954) as applied to claims 1-8 above, and further in view of Constantin et al (U.S. Patent 7,154,622).

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With regard to claim 9, Foote discloses fails to disclose an encryption unit for encrypting the input image data and the mesh image data with the same encryption method. However, at the same field of endeavor, Constantin discloses this feature (refer to col. 4, lines 64-67). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate Constantin teaching image data encryption process into Foote system. The suggestion/motivation for doing so would have been to provide a document encryption system. Therefore, it would have been obvious to combine Constantin with Foote to obtain the invention as specified in claims 9 and 15.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to

data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim 19 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 19 defines a “a program for causing a computer to execute....” embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., “When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized” – Guidelines Annex IV). That is, the scope of the presently claimed “a program for causing a computer to execute....” can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on “computer-readable medium” or equivalent in order to make the claim

statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Other Prior Art Cited

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. (6643230), (5754299), (6816625), (7046401) and (6640305).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSEF KASSA whose telephone number is (571) 272-7452. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communication and (571) 273-8300 for after Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

09/11/2007.

YOSEF KASSA

PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Yusef Kassa', written in a cursive style.